TEACHING AND LEARNING RESOURCES IN PRESCHOOL PLAYROOMS IN THE QWAQWA REGION OF THE FREE STATE: IDEALS AND REALITIES

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ABSTRACT

Teaching and Learning Resources in Preschool Playrooms in the QwaQwa Region of the Free State: Ideals and Realities.

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This research was conducted in the QwaQwa region of the Free State Province of South Africa. The purpose of this study was to investigate the availability of resources in the preschool playrooms and the use made of those resources by teachers. The study also looked at how preschool teachers envisaged the ideal classroom for their pupils.

The results showed that the 24 participating classes were badly under-resourced, and that this under-resourcing had a negative impact on teaching and learning. However, the study also found that preschool teachers did a good job in the face of adversity. They provided learners with as broad a range of activities that they could, partially by managing their classes well and partially by bringing in materials from home. The investigation into the teachers' view of the ideal classroom revealed the teachers to be reasonable and practical people. The teachers gave highest priority to materials that would promote basic language and mathematics skills.

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CHAPTER 1

When Whites arrived in South Africa they formed the woefully misguided view that native Africans did not have a system of education. In fact, Africans actually had a highly functional system that could be best characterized by the term *ubuntu* (humanness). This education was provided in a traditional African milieu and stressed human values in every aspect of life. One of its major tenets was to discourage all competitiveness that rewarded individual performance at the expense of the group (Molten, 1986).

Having formed the opinion that Blacks were primitive illiterates, the White immigrants set about organizing their own system of education based on a philosophy that was fundamentally anathema to indigenous values. The native system of education essentially collapsed in the wake of the social upheaval that resulted from the arrival of Europeans and the only recognized education quickly became that put in place by Whites for Whites.

From the arrival of Europeans in South Africa until well into the second half of the nineteenth century, education was offered on a very limited scale. It was destined for Whites only, but did not reach the full White population as a result of the geographically scattered nature of the rural community (Behr, 1988). The first changes in educational policy were designed to cater to the particular needs of the White population. These measures ranged from bringing the school to the child through the travelling teacher and one-teacher school in the bush, to bringing the child to the school throughout transport schemes and boarding hostels (Behr, 1998).

Blacks were not included in all these measures, as they were either deemed not worthy of receiving any form of education or were seen fit to be educated for total subservience. The first point of view is illustrated by the following quotation, "We should not give the Natives any academic education. If we do, who is going to do the manual labour in the (White) community?" (Christie, 1986, p 8). The second notion is expressed by Verwoerd, first in 1953 and then again in 1955: "When I have control over native education, I will reform it so that natives will be taught from childhood that equality with Europeans is not for them" and " There is no place for the Bantu in the European community above the level of certain forms of labour" (Christie, 1986, pp. 10, 23).

These opinions reflect the thinking of many powerful members of the White minority prior to the 1994 democratic elections. They also translated into a hierarchical educational structure organized along racial lines. The apartheid system separated Whites from non-Whites, that is, Coloureds, Indians, and Blacks, in that order. All social and political institutions were divided along racial lines, and the educational system was no exception. All schools for non-Whites – and particularly those for Blacks – were designed purposefully and deliberately to be of inferior quality. (Mncwabe, 1990). There were twenty-three different education departments for all the racial groups combined. These were in turn divided into sub-systems or education authorities. The White population was assigned four of the 23 provincial departments, Transvaal, Cape Province, Orange Free State, and Natal. These fell under the jurisdiction of the Department of National Education and Culture. One department handled Coloured education, one Indian education, and one Black education within White areas. Nine separate departments were found in the national states and in the territories given a form of independence by the

South African government. The Department of Education and Training controlled education for Blacks outside these areas and offered professional assistance to the non-independent national states. The independent states had to provide a budget for their own education systems because there was no subsidy for education from the South African government (Mncwabe, 1990).

After the 1994 democratic elections, all of the social and political institutions of South Africa underwent massive transition. The new government was faced with the mammoth task of trying to bring all the various forms of non-White education up to the standards set for Whites. Since the Black population was at the greatest disadvantage under apartheid, its educational needs proved to be the most pressing. Black schools were severely understaffed, under-funded, and under-resourced. Action had to be taken quickly, starting at the entry point for children in the educational system: pre-primary or preschool classes.

Pre-primary education for children in disadvantaged communities was only introduced in 1985, whereas, for children from advantaged communities, it was already in existence (Dekker & Lemmer, 1993; Louw, 1995). Prior to that, Black children had to remain at home or in a crèche until they had reached the appropriate school entry age (school readiness). When the government introduced pre-primary education for Black children it was to be housed in schools that were already in existence. Facilities, such as school buildings and classrooms, were frequently not of good quality. Essential furnishings, for example desks, chairs, sinks, cubicles, and toilets were not suitable for six-year-olds, and were not well maintained.

Furthermore, there was no general government policy that regulated preschool education for Blacks in South Africa (Van den Heever, 1985). Even after the 1994 general elections a policy to regulate preschool education was still not in place. In addition, many centres for childhood education were privately established and there was no control by the government to ensure the quality as well as the relevance of the education provided.

Since 1994 many changes have come to South African schools in general and to preschool classes in particular. It is now time to assess the impact of initial government attempts at redressing the colour imbalance and providing all South African children, regardless of skin colour, with a fair chance to succeed, starting from their first day of contact with formal education.

This particular piece of research will examine and assess one small part of the massive change process in the new South Africa by looking at the state of materials and equipment in 24 preschool playrooms, examining the use made of available resources, and consulting teachers concerning what the ideal preschool playroom should look like in their schools.

The Author's Profile

Maria Maketsa Nkosi is a lecturer at Tshiya College of education. She was born in Soweto Township in Gauteng Province in South Africa in the year 1960. Her father worked as a labourer at a furniture manufacturing company, and her mother was a housewife. She attended primary and then secondary school in Soweto from 1964 (i.e., at a time when Black children were recruited to schools irrespective of their school

readiness) until 1981. She was out of school for two years at the end of the 1970's because of the school closures resulting from the 1976 student riots against the apartheid regime.

She received a B.A. from the University of the North (Turfloop) in 1988. She was attached to the Modjadji College of Education in the Northern Province (now Limpopo) from 1988 until May 1996, and then joined Tshiya College of Education, where she still works, in June 1996. Maria lives with her mother and eleven siblings in Soweto.

It was while holding her first teaching post at Modjadji College of Education that she became involved in evaluating student teachers. Visiting local schools exposed her to a variety of different teaching-learning milieus. She could thus observe the many disparities resulting from years of apartheid in South Africa. In particular, she noted how the quality of classroom facilities varied from excellent in White schools to deplorable in Black schools. It was these observations that inspired Maria's current study.

Explanation of Educational Terms

ECE: Early Childhood Educare is a phrase that was coined by people who worked with children from birth to age 6 in South Africa and this was to convey their understanding of the needs of children during this time period (Padayachie et al., 1994)

Educare: This is a term referring to the provision of education and care of children from birth to age six. It is a holistic programme that supports young children's growth and development. This term has been superseded by the term Early Childhood Development (ECD) (National Department of Education, 1996).

ECD: Early Childhood Development is the current term for Educare. (See definition above).

Reception / Preschool phase: In South Africa this refers to the initial level of school entry for young children that is designed to prepare them for formal education. Normally children enter this phase at age 6 (National Department of Education, 1996).

Crèche: This is a place where children younger than six years are looked after while their parents work. These children do not receive any form of formal education (Dekker & Lemmer, 1993).

School readiness: This is defined as the sum of the child's physical, mental, social, and emotional development at a particular time (Ambron, 1992).

Bantu: This term literally means "people" in Xhosa. It was used by the pre-1976 National Party Government to describe the country's African population (Dekker & Lemmer, 1993).

Bantu Education: This is an education system, which became law in 1953. Bantu Education was the system reserved for the Blacks of South Africa (Khotseng, 1990).

Nation Party (NP): The National Party was a political party founded by Barry Hertzog in 1914 to represent Afrikaner interests (Behr, 1988).

Own affairs: These are matters "which specifically or differentially affect a population group in relation to the maintenance of its identity and the upholding and furtherance of its way of life, culture, traditions and customs" (Fourie, Griessel & Vester, 1991).

TBVC: This stands for the homelands, which opted for independence from the South African apartheid government. T = Transkei; B = Bophuthatswana; V = Venda; and C = Ciskei (Behr, 1988).

CHAPTER 2

SURVEY OF THE LITERATURE

An Overview of the History and Philosophy Underlying Education in South Africa

The White-Black dichotomy

Education in the Republic of South Africa has been the subject of numerous books, articles and conferences. Prior to 1994, a small White minority dictated educational legislation to all and ensured that educational facilities were provided for the four main ethnic groups, that is Whites, Coloureds, Indians, and Blacks. Understanding the consequences of separate development is essential to understanding the current state of education in South Africa.

The problem of segregation has been a recurrent theme throughout South African history. At the core of this problem is the relationship between the different ethnic groups in various fields of human endeavour: domestic, economic, educational, political, religious and social, (Behr, 1988). Since the day Van Riebeeck landed at the Cape in 1652 two sets of conflicting forces have been in continuous operation – one tending to draw the races together, the other tending to keep them apart.

A policy of completely separate education was implemented in 1952 by Dr H. F. Verwoerd in his capacity as Minister of the then Department of Native (which was later changed to Bantu) Affairs. Verwoerd was convinced that the political rights of Blacks should be based on the traditional authority (i.e., the chieftains) of their ethnic groups, and not be linked to those of Whites. Dr Verwoerd was also responsible for the Bantu Authorities Act of 1951, which resulted in the establishment of Black areas. These were called first reserves and then homelands. They were QwaQwa, Lebowa, Kwandebele,

KwaZulu, Kangwane and Gazankulu, Transkei, Bophuthatswana, Venda and Ciskei (TBVC) (Behr, 1988). They were all self-governing national states.

In 1976 Transkei opted for independent status and by 1986 Bophuthatswana, Ciskei and Venda had followed suit. All these states continued to receive their finances from the Treasury of the RSA. These states had a Department of Education headed by a minister of the cabinet. This department collaborated with the Department of Education and Training (DET), which was responsible for the education of Blacks residing within the borders of the RSA.

The main thrust of White educational policy for the Blacks of South Africa was that the "natives" were different from their White counterparts and therefore had to be taught differently. The education system should serve to teach Black South Africans to accept their "proper place" in society (Dekker & Lemmer, 1993).

The foundations of educational crisis in South Africa

"The whole history of Black education has always been that of under-provision, inadequacy, inefficiency. The government and the educational authorities have always spent most of their time, energies and even money on racial and ethical matters which were educationally irrelevant" (Thembela, 1986). Under-resourced and largely irrelevant, the education offered to the Blacks of South Africa under apartheid resulted in a steady dwindling of Africans going on to advanced technical and professional education, in proportion to their population, and the promotion of a detrimental form of tribalism (Mncwabe, 1990).

Black political organisations reacted with anger to this situation. The African National Congress (ANC) suggested that alternative schools be set up to give African

children a proper education. Dr Verwoerd responded negatively to the suggestion and decreed that no private schools could be set up without being registered by the Native Affairs Department (Tamir, 1995). After this refusal, Blacks who could afford to do so pulled their children out of local schools and began sending them to Lesotho, Swaziland and Botswana, where they could receive a much better education.

In 1976, the situation came to a head and there was an open revolt against Black education under apartheid. Black students took to the streets, the system of education collapsed, and schools closed.

In 1979 the system began a slow recovery. Students returned to the classroom after having been out of school for up to two years. Irreparable damage had been done to Black schools in the course of rioting, so the students returned to horrid learning conditions and a shortened school day. Even though schools were restored and/or rebuilt, the quality of education, not high to start with, never recovered. The culture of teaching and learning had been dealt a very serious blow.

When Blacks finally acceded to power in South Africa in 1994, the educational reconstruction job facing them was monumental in its scope. Everything had to be rebuilt or restructured, and the population had to relearn the importance of education.

Educational services

In apartheid South Africa, provinces administered primary and secondary education and teacher training for Whites. In White schools children were instructed in their mother tongue, either English or Afrikaans. Their education was free and their school attendance compulsory from age seven to age sixteen. Books and equipment were provided. For Asians and Coloureds education was also free and compulsory where the

facilities existed. This varied from local authority to local authority. The Coloured and Indian administrations for education were under the responsibility of the Minister of Coloured Affairs and the Ministry of Indian Affairs.

The Department of Bantu Administration and Development and Bantu Education administered Black African education at all levels. Schooling for African children was neither free nor compulsory, and parents were responsible for the cost of some of the books and equipment. By 1968, per capita expenditure on Black African education was one-eighth of the amount spent on Whites. Roughly half of Black schools had to hold double sessions to accommodate all the students who wished to study (Mncwabe, 1990).

Table 1
Per Capita Spending on Education for All Racial Groups in South Africa in 1984

Race	Per capita spending
Blacks	R146.00
Coloureds	R498.00
Indians	R711.00
Whites	R1211.00

(South African Committee on Higher Education, 1985, p. 98)

Sociology of the South African society and its race relations

The ethnic composition of the population of South Africa is extremely complex. Broadly speaking, it is made up of Blacks, Indians, Coloureds and Whites, but there are many sub-groupings that follow linguistic and/or tribal (ethnic) lines (Mncwabe, 1990).

Many of the problems that plague South African education are a direct result of the juxtaposition of "people who differ widely as to racial origin, culture and standards of civilisation and religion" (Mncwabe, 1990, p. 14). Race, language, education and politics

are inextricably interwoven in South Africa, and, as a result, Black education was for years administered as a political rather than a truly educational issue. In other words, there was little concern shown for the development of academic skills in Black schools. Instead, the schools were used to create a politically subservient Black majority. The question of providing Blacks with the critical thinking skills necessary to ensure their participation in the economic and political life of their country did not emerge until the collapse of apartheid and the beginning of democracy in South Africa.

The Problems Facing South African Education Today

The biggest problem currently facing policy makers in the Republic of South Africa is how to secure equal educational opportunities for all learners, regardless of skin colour (Mncwabe, 1990). After 1994 elections, all public schools were opened to admit everyone regardless of race. This resulted in a massive migration of students from Black schools to White, Indian or Coloured schools. For example, the Vaal Triangle Technikon went from being completely White to 98% Black within a period of three years (personal communication). While this migration solved some problems (i.e., by providing Black students with better resources and infrastructure), it has created others. Whites often withdrew their children from public schools and either enrolled them in private institutions out of the financial reach of Blacks, or sent them abroad. In this way, the colour barrier has remained unbroken. Many White schools simply became Black schools. The Black children found themselves studying in better conditions, but not necessarily with White classmates. (National Department of Education, 1996).

Furthermore, the migration of Black teachers has not always followed the migration of Black students. Under apartheid, Blacks did not have the same rights as their White counterparts. For example, while Whites could be seconded to teach in Black institutions (colleges of education, technical colleges, technikons and universities), Blacks were not permitted to teach in White institutions. Their educational backgrounds were considered to be substandard and a Colour Bar Act was in place. This situation was relaxed a bit towards the end of apartheid as some Blacks were recruited to offer lecturers at institutions of higher learning (Entwistle, 1978).

The government is presently engaged in the process of rationalizing the education system at all levels and redeploying teachers. But even though this redeployment mostly affects Black teachers, they are not being reassigned to traditionally White schools. They are still perceived to lack the qualifications to teach in the better schools.

Today, relatively few White students are being taught by Blacks, while many Black families actively seek out schools able to provide White teachers for their children. This tendency is largely attributable to the fact that success is still measured in terms of mainstream White cultural values, probably because Black parents have never had an opportunity to develop their own set of aspirations for their children. Often the aspirations that Black parents have constructed in an *ad hoc* manner since 1994 are unrealistic in terms of educational reality in contemporary South Africa (National Department of Education, 1996).

Although the Black majority has now taken over the running of education, English has been maintained as the language of instruction, particularly beyond the junior primary level. This results in teaching situations where Sesotho or IsiZulu-speaking

educators teach Sesotho or IsiZulu -speaking children in English, a language mastered imperfectly by both parties. The language question is a delicate one in South Africa. Blacks and Whites alike feel that mastery of English is the key to success, but the system cannot afford to provide either linguistic support to L2 children or mother-tongue literacy programmes. The result has been a basic literacy problem that starts at the preschool level when L2 children are provided with English language materials and left to muddle through them unassisted (National Department of Education, 1996).

Preschool education in South Africa under apartheid

In South Africa preschool education for non-Whites was not introduced in schools until 1985 (National Department of Education, 1997). In contrast, preschool for Whites in South Africa was introduced as early as 1930 around the area of Johannesburg. These early preschools took the form of crèches and play centres. White preschools did not become institutionalised until 1969, when provincial administrations were granted control of classes that had previously been run out of private homes (Hurlock, 1992). Thereafter there was a tremendous expansion of preschool education for Whites, largely under the impetus of associations such as the Nursery School Association of South Africa (NSASA), the Transvaal Association of Preschool Education (TAPE) and the Cape Association of Preschool Education (National Department of Education, 1997). From the outset, White preschools were given adequate buildings, resources, equipment and materials.

Following the crisis in Black education in the late 1970s, there was also concern voiced about the poor performance of Black children in Department of Education and Training (DET) schools. The De Lange Commission (Human Sciences Research Council,

1983) noted the high drop out and failure rates of Black children. These findings finally forced discussion of the importance of early childhood education for disadvantaged children and led to increased funding for crèches (day care facilities with no instructional content). In the mid 1980s when the crèches had gained some momentum, the government suddenly eliminated their funding.

In 1987 the government launched a preschool enrichment programme for Blacks. This programme was piloted in few selected schools. The government's intention was to enhance children's school readiness (Behr, 1988). While the initiative was a good one, the classes were housed in inadequate classrooms in local primary schools and the number of qualified pre-primary teachers was very low (Koekemoor, 1997).

Furthermore, the preschools were inadequate in number. In 1990 it was estimated that children under the age of six years in South Africa were about 6.3 million, with 83 % being Black, Coloured or Indian, and only 7.5 % Whites (see Table 2). Yet the number of White children who registered in pre –school was almost twice that of their Black counterparts (Padayachie et al., 1994).

Table 2
South African Population Profile (1991)

	Total Population	Children 5-6 years of age	Children 0-6 years of age
Africans	28 712 400	774 000	4 838 200
Coloureds	3 278 300	71 800	448 600
Indians	986 600	19 200	119 800
White	5 061 000	68 800	430 100
Total	38 038 300	933 800	5 836 700

By the end of apartheid, government spending for a pre-primary year for the average White child was R1, 684 (with the range being from R 1146 to R 3,107). For Black children the average expenditure was R38.00 (see Tables 3 and 4). White children not only had greater access to pre-primary education, but the quality of the education they received was radically different than that granted Blacks (Padayachie et al., 1994).

Table 3
Government Expenditure on Early Childhood Education by Racial Group (1992)

Racial Group	Amount / child (Rands)
White	1 684
Indians	188
Coloureds	752
Blacks: DET	38
Blacks: Homelands	536

Table 4
Children Aged 0 – 6 Years in Early Childhood Facilities According to Racial Group (1992)

Race Group	Subsidised by Dept. of Ed.	Other	Total
African	108 062	226 688	334 750
Coloureds	25 519	28 481	54 000
Indian	15 239	1 761	17 000
White	49 409	110 519	160 000
Total	198 229	367 521	565 750

National Educational Policy Investigation (1992)

Preschool teacher training

White preschool teachers were properly trained in the field from the outset. Courses were offered in Cape Province, Natal, Transvaal and the Orange Free State. Programmes of study varied in duration from three to four years. In contrast, Black

preschool teachers initially received no training at all. It was not until the 1980s that the government showed an inclination to give Black preschool education any support. The non-state pre-primary schools were given a subsidy, and the training course for pre-primary teachers was introduced. This diploma was for a period of three years. Training programmes were started at the Soweto and Good Hope colleges of education.

The early childhood development community

In South Africa early childhood sectors have grown dramatically over twenty years, and have a history of targeting disadvantaged communities and in particular isolated and marginalized women and children. Many early childhood programmes are initiatives which have emerged organically from within communities, and they have always been developed in line with nation-building ideals. Early childhood programmes designed by the non-governmental agencies (NGOs) concentrated heavily on community mobilisation in support of young children. In direct response to community-based initiatives for children care programmes, pilot programmes, training and support services, materials and other resources are developed by the early childhood sector in an attempt to redress the gaps and inequalities of the state of education system (Padayachie et al., 1994).

Children and Play

It is evident to people who work with young children that play is serious business and that the opportunity for children to play freely is vital to their healthy development. The beginnings of play appear in infancy when the baby starts to be aware of people and objects. Being able to play freely requires a sense of trust: achieving this is the first and

most basic task in developing play. The pre-primary child plays best in the presence of the teacher because it is here that he/she feels secure. Children continue to need a responsible person nearby and readily available when they are playing together. They might need the teacher's help, but the teacher must avoid taking over their play (National Department of Education, 1997).

A young child come to his or her first classroom already a complex individual who has been playing and learning for five years. Through play the child learns to be attentive, to listen, to perceive, to understand, to try to interpret and then to communicate. Play is the child's way of learning, and it is the work of early childhood. It is through play that children gain the satisfaction they need to allow them to continue to learn.

Play allows children to experiment with unresolved situations or problems they perceive around themselves. Play facilitates the cognitive growth of the children by permitting them and encouraging them to do, rather than being done to or being told what to do (Munroe, 1991).

Pitout, Du Plessis, Jacobs, and Russell (1993) discovered that children's play is just as important to them as work is for an adult. As far as children are concerned, there is nothing more serious than play. Children's playing activities cannot be understood in the same way as adults' leisure activities. Play is what adults do when they have finished their work; it is a form of relaxation. For young children, play gives rise to mental, social and physical development. Play also has a direct and far-reaching significance as far as children's attitude towards reality is concerned. Pitout et al (1993) conclude there is hardly an area of knowledge that cannot be learnt by making use of play.

Play, as a form of existence is especially significant to the teacher as spontaneous learning of the child can be directed effectively. Spodek (1993) and Landman (1990) argue that through play children establish a relationship with the things around them (animals, plants, soil and toys) and with their fellow man, (first parents, then other children and adults). Play is seen as one of the best ways for children to express their inner feelings.

Playroom Areas

Layout

" Play is very significant to young children and children learn while playing by themselves and with each other" (Schoeman & Van der Merwe, 1996, p. 13). Their play is imaginative, therefore teachers need to update the play areas and optimise provision for play in the classroom so that young children will be stimulated.

The arrangement of a playroom should indicate to the child where different activities and learning areas are, and how to move to them without disturbing others. The arrangement should promote child autonomy and lead children to concentrate and control their behaviour, to use their initiative and experiment with various things, and to be creative. The playroom arrangement should give children a feeling of being in a home environment in which they know where to find various playing objects (Schoeman & Van der Merwe, 1996).

Equipment and materials

A playroom that is furnished with appropriate equipment and materials will create a supportive environment where children can begin to develop the skills needed for living

and working together. The arrangement of playroom equipment and materials helps children select activities and play constructively, either alone or with peers. Children need a variety of concrete experiences in order to learn as they learn by doing, exploring, discovering and experimenting. The arrangement of a playroom is a major factor in the success or failure of play within it (Schoeman & Van der Merwe, 1996).

Children can derive various types of knowledge from their actions on objects and from their direct concrete experiences with objects. Objects in the playroom are crucial to the formulation of accurate concepts, particularly mathematical concepts. For example, children can use toys and other objects to learn to group things that come in twos, such as hands, eyes, feet, legs, ears and so on.

Young children think differently about numbers than do adults (Jameson & Kidd, 1974). These researchers also cite Piaget's comment that children cannot be taught numbers only by thinking about quantities. Instead, they learn about numbers through acting on their environment with concrete materials in many different situations. They add that Piaget did not define "acting on the environment" as doing repetitive drills or mental exercises, but rather as actively handling objects. Preschool playrooms should give children such an opportunity by offering them a multitude of experiences involving numbers, cooking, water play, sand play, blocks, dramatic play, puzzles, table toys and many other play materials.

Fontana (1986) points out that children have a tendency to use things the way they like, even though adults might perceive it as the "wrong" way. Playrooms should be set up and equipped so as to allow room for innovative use of objects. Amont the classic objects that all playrooms must have are paints, blocks, sandboxes, and materials that

could be used in play acting and role playing, such as costmes. Fontana also notes that experimenting with paint can be just as significant for children as producing a finished picture. "Painting will not be an exciting activity for young children if their only experience is ready–mixed paint in non-spill pots applied with a thick brush to white paper" (Burns, 1988, p. 5).

Mayesky, Neuman and Wlodkowski (1990) note that blocks are one of the timeless, classic play materials that children love. Blocks provide endless opportunities for the development of perceptual-motor skills and endless possibilities for emotional satisfaction. For example a shy child may build him/ herself a house and seek safety within it. Children like to build huge structures and this helps them to feel strong and masterful. Blocks are also strongly contribute to the development of the intellectual abilities of the child. Children may use blocks to demonstrate conservation of volume, the principle of transitivity, and quantity. Block building promotes social relationships and co-ordination (National Department of Education, 1996). Some the schools do not have blocks, whereas others do have them, but they are not attractive to the eyes of children because they are not painted.

Sand and mud have a wonderful messy, unstructured quality that make them among the most popular creative play materials. They offer rich tactile sensory experiences and provide emotional relief as well. These materials also facilitate a lot of social interaction. Children love to play co-operatively with each other while digging tunnels, constructing roads, etc. These materials which offer children the chance to mix, stir, pour, measure, mould are indispensable components of the pre-primary school. Their

experience is often restricted at home, so it is particularly significant to offer it at pre-primary school. (National Department of Education, 1996).

Dramatic play such as dress-up and housekeeping is usually very social in nature. It almost always involves more than one child at a time and contains a lot of role-playing (mother, father, brother, sister, baby, etc). All of these activities develop the use of language. Costumes also enhance play and provision should be made to include costumes to accommodate everybody (Mayesky et al, 1990).

The language issue

After the 1994 elections, South African schools introduced English as a medium of instruction starting from preschool level. However, finding printed materials appropriate for teaching young Black children at preschool, virtually all L2 learners, posed a serious problem. L1 materials were beyond their linguistic ability in English and L2 materials are simply not available in the country (National Department of Education, 1996).

Ghosn's (1992) research findings from Lebanese English-language medium kindergarten classes are relevant here. Ghosn (1992) found that the context of the lessons taught assumed that learners possessed a level of cultural awareness that they had not yet achieved. Secondly, the texts used were not intended for four-year-olds but targeted the cognitive level of six to seven year olds. Thirdly, the cost of properly adapted texts would have been exorbitant, and disadvantaged schools would never have been able to buy them. ESL texts prepared for developing countries cost less, but are restricted in context and are structured around vocabulary and grammar exercises. Furthermore, the content of these texts is frequently not suitable for very young children.

In South Africa English is used as a medium of instruction in school while at home children have no contact with it. This means that L2 children must not only use English in school but also learn English in school. Since no specific ESL instruction is offered to South Africa's L2 children, the only opportunity t for these children o learn English before it is offered to them as a medium of instructions is in preschool

CHAPTER 3

METHODOLOGY

This study has a three-pronged goal. Firstly, it surveyed the available material and equipment in preschool playrooms situated in schools in the Phuthaditjhaba District of the Free State. Secondly, it asked the teachers of these classes what material and equipment they would like to have in their ideal classroom. Finally, it considered the way in which teachers made use of the material and equipment they had in their possession. The first two areas were explored by means of a questionnaire, while the third area was investigated during classroom visits and subsequent informal interviews with teachers.

Permission to conduct research in the participating schools was granted by the Free State Director of Department of Education responsible for General Education and Training Certificate (GETC). The letter of approval can be found in Appendix A.

The Socio-Economic Situation of the Sampled Schools

Phuthaditjhaba is a township found within the QwaQwa region, situated in the north-eastern part of Free State Province. Prior to 1994, QwaQwa was a self-governing homeland that the South African apartheid government established for non-Whites, especially, for Southern Sesotho-speaking Blacks. Today the region is still poor and, is currently regarded as a focal point for social and economic development by the government of national unity (GNU). This region was chosen for the study because of its poverty and lack of resources. Many studies of

classroom equipment are done in affluent areas that in no way represent the situation of the general population. By looking at what materials were present in under-resourced classrooms, the researcher hoped to come closer to describing the South African educational reality of the majority.

The Questionnaire

The questionnaire consisted of five parts (see Appendix B).

Part I of the questionnaire was used to gather information about the participating teachers. They were asked to answer items about their general teaching experience, their preschool teaching experience, their training, and their age group.

Part II dealt with the distribution of children in the participating schools. It established the age range of the preschoolers, the number of children in each class, and the gender balance. This part of the questionnaire also asked teachers about the way they grouped the children within their classroom. Finally, they were asked if these groups remained the same throughout the school year or were changed periodically.

Part III covered classroom management issues. Teachers, as the managers of their classes, were to explain how they kept a record of individual children's work and how they tracked the participation of children in groups during the structured activities. This section of the questionnaire required teachers to write their responses. It was completed in full by some participating teachers, but only

sketchily by others. For this reason it could not be heavily relied upon in the final analysis.

Part IV of the questionnaire collected information concerning the availability of material and equipment in the preschool playrooms under study. The items were structured so as to gather information about materials and equipment used inside the classroom – either in learning centres (e.g., painting area, construction area) and or in discovery corners (e.g. science corner, maths corner) – and also outside the classroom (e.g., sand box, water area). Teachers were offered an extensive array of possible materials, learning centres and discovery areas. They were then asked to indicate whether such things were available in their schools in sufficient quantity, available but in insufficient quantity, or not available at all.

Part V asked participants about what they felt they needed most in their classes. Once again, the questionnaire offered the teachers a wide range of possible classroom materials. This time the teachers were asked to rank the suggested items according to their degree of desirability. Teachers were also offered space to write in their own suggestions, but very few availed themselves of this opportunity.

The researcher distributed the questionnaires personally by taking them to schools and handing them over to preschool teachers. The participants were given a period of one week to complete the questionnaire and then the researcher returned to collect them.

Sample

Schools and teachers

There are 27 primary schools in Phuthaditjhaba District, 13 of which accept practice teachers from Tshiya College of Education. All these schools follow the same syllabi, use the same prescribed books, and are subject to the same regulations. This ensured a certain cross-sample homogeneity. Furthermore, protocols had already been established between these schools and the College and there was already an excellent working relationship between the college lecturers and the primary teachers.

Teacher questionnaires were sent to 32 teachers of the 13 cooperating schools. Twenty-four teachers representing 10 schools returned completed questionnaires. The schools are identified by means of an assigned number from one to ten.

Table 5
Number of Participating Teachers by School

School	1	2	3	4	5	6	7	8	9	10
No. of Teachers (N = 24)	1	2	3	4	3	3	4	2	1	1

Letters were then sent to the ten primary schools represented by the returned questionnaires to request permission to observe classes conducted by the 24 respondents. The schools granted permission and observation proceeded.

Observation

Classroom observations were done in the course of practice teaching supervision visits conducted by the researcher. The researcher observed and noted when and how classroom materials, learning centres, and discovery areas were used by the regular teachers as they modelled for practice teachers.

Informal interview

Informal interviews were done as a follow-up to what the researcher had observed in classrooms in the course of practice teacher supervision. Certain things occurred in the course of lessons and activities that piqued the curiosity of the researcher. At the conclusion of observed lessons, she met with the teacher and asked questions that allowed her to clarify certain points. Questions were asked regarding classroom management decisions (e.g., Where do you store children's work?) and regarding the structure of lessons (e.g., How do these activities relate to your main theme?), and, of course, regarding the use of classroom materials (e.g., Why did you choose to have the children use the paint corner at this point in the day?). The teachers' responses were recorded in writing by the researcher.

Data analysis

All quantifiable data extracted from the questionnaire were entered into SPSS and analysed as follows. There was an initial frequency count done to categorize the teachers' responses so that they could be presented in tables. Next, analyses were run to determine if response patterns reached levels of statistical significance. Given the relatively small sampling size and the wide array of choices

available for most items, none of the results achieved statistical significance. A decision was therefore made to discuss the raw data in terms of the tendencies that emerged during analysis.

The observation and interview data collected were qualitative rather than quantitative. Since it is impossible to present detailed narratives for all of the 24 classes observed, a single narrative, typical of the observation experience, is presented in Chapter 4. This narrative provides the reader with a sense of how the classrooms were equipped and how the equipment and materials were used by teachers and pupils alike.

CHAPTER 4

RESULTS

Results from the questionnaires filled out by the 24 participating teachers representing 10 different schools are reported below. For most items, all the participants responded. On some occasions one or two participants failed to provide an answer, while on others, some teachers provided more than one answer to an item. This explains why the total number of responses sometimes varies. The results are reported as percentages of the total number of participants (i.e., 24).

General Information: Teachers

Table 6 summarizes the teaching experience of the participants, first generally and then at the preschool level.

Table 6
Experience of Preschool Teachers (Expressed in Percentages)

Years	1-2	3-5	6-10	11-20	Over 20
General teaching experience	-	8	25	46	21
Preschool teaching experience	13	33	29	25	-

Table 7 outlines the qualifications held by the participants. Many of the teachers hold more than one diploma, the result of training first as primary teachers and then retraining on a part-time basis as pre-primary teachers. Two participants failed to complete this section of the questionnaire. The diplomas are abbreviated as follows:

PPD = Pre-Primary Diploma, JPTD = Junior Primary Teaching Diploma, SPTD = Senior Primary Teaching Diploma, PTC = Primary Teacher's Certificate, HED = Higher Education Diploma.

Table 7:
Qualifications of Preschool Teachers

Qualification	PPD	JPTD	SPTD	PTC	HED	Unknown
% of teachers holding qualification	54	38	4	4	8	8

The age groups into which the participants fall are shown in Table 8. The fact that there are few teachers under 30 years of age involved in the study is a good reflection of current teacher demographics in South Africa. There has been an oversupply problem for a number of years and, as a result, there have been few job openings for young teachers since 1999.

Table 8
Age of Preschool Teachers

Age range	20-24	25-29	30-34	35-39	40-44	45+
% of teachers	-	8	8	46	13	25

General Information: Pupils

The children in the participating classes ranged in age from five to seven years. The vast majority of them were six at the time of the study. In all there were 451 boys, 441

girls in the classes surveyed. The average class size was 37. The largest class was 48 and the smallest was 22.

The pupils were grouped as reported in Tables 9 and 10. The majority of the groups were quite large; most had at least six members and some were as large as nine. The large groups were probably made necessary by the large size of the classes and the small size of the classrooms. Teachers often had no choice but to form five or six large groups as no other format would work.

Table 9
Group Membership Sizes and Percentage of Classes Having Each Size

Children per group	5	6	7	8	9
Percentage of classes	8	42	29	17	4

Table 10
Number of Groups Per Class and Percentage of Classes Having That Number of Groups

Number of groups per class	3	4	5	6	7
% of classes	8	4	38	33	17

Table 11 shows the grouping criteria reported by teachers. Some teachers used a combination of criteria to group their pupils. The teachers tended very strongly to change groupings over the course of the school year.

Table 11
Percentage of Teachers Using Different Criteria for Grouping Preschool Children

By ability	By friends	Mix of abilities	Randomly assigned by teacher	Permanent groupings Yes	No
42	-	17	50	25	75

The State of Preschool Classrooms

In general, the classrooms visited proved to be under-resourced. Very few materials were available in adequate supply. Indeed, very few materials were available at all. Table 12 provides a summary of resources as reported by the participating teachers.

Diametrically opposed to the current reality of the participating pre-primary classes is the ideal classroom imagined by the teachers. Table 13 shows the importance the teachers accorded various types of materials that would grace their ideal classroom. To a person, the teachers wished for well-equipped classrooms in which their pupils could expand their horizons and learn.

Table 12
Availability of Equipment in Preschools (Expressed in Percentages)

Type of equipment	Available and sufficient	Available but insufficient	Not available
Balancing blocks	29	25.0	45.8
Book corner	33	58.3	8.3
Clay/dough	29	33.3	37.5
Collage corner	50	25.0	25.0
Construction corner	21	29.2	50.0
Children's cubicles	42	8.3	50.0
Cooking corner	17	16.7	66.7
Fantasy corner	25	50.0	25.0
Fitting blocks	8	91.7	-
House play	29	25.0	45.8
Interest corner	63	25.0	12.5
Large blocks	13	33.3	54.2
Maths corner	17	8.3	75.0
Movable blocks	13	8.3	79.2
Multishape blocks	21	37.5	41.7
Music corner	25	37.5	37.5
Paint corner	71	29.2	-
Plant/animal corner	13	8.3	79.2
Puppet corner	8	12.5	79.2
Puzzles	29	41.7	29.2
Rest corner	17	16.7	66.7
Sand corner	42	8.3	50.0
Science corner	21	79.2	-
Sewing/knitting corner	4	95.8	-
Shop corner	33	12.5	54.2
Table blocks	17	12.5	70.8
Wood work corner	8	16.7	75.0
Wagon blocks	4	33.3	62.5
Water corner	42	4.2	54.2

Table 13
Ideal Preschool Classroom Conditions as Envisaged by Teachers (Percentage of 24 Respondents)

Type of equipment	Slightly desired	Moderately desired	Strongly desired	Very strongly desired	Essential
Balancing blocks	-	4	4	33	33
Book corner		8	-	8	63
Clay/dough	4	-	13	8	54
Collage corner	-	4	-	25	46
Construction corner	-	-	-	38	42
Children's cubicles	-	4	-	21	50
Cooking corner	4	-	17	17	50
Fantasy corner	-	4	4	17	54
Fitting blocks	-	8	13	21	29
House play	-	-	4	21	67
Interest corner	-	8	-	8	58
Large blocks	-	4	8	38	33
Maths corner	-	4	-	8	71
Movable blocks	-	-	-	38	42
Multishape blocks	-	-	8	21	46
Music corner	-	-	4	21	38
Paint corner	-	8	-	17	50
Plant/animal corner	-	-	-	21	63
Puppet corner	-	-	4	33	63
Puzzles	-	4	-	17	50
Rest corner	8	13	13	17	29
Sand corner	-	4	-	8	58
Science corner	-	-	8	21	54
Sewing/knitting corner	-	13	4	33	29
Shop corner	-	13	-	29	38
Table blocks	-	13	4	17	38
Wood work corner	-	-	8	38	38
Wagon blocks	-	-	21	29	33
Water corner	-	-	8	8	46

Classroom Visits: Sample Classroom Observation Narrative

The physical setting

The observed class had 40 children, three of whom were absent on the day the observation took place. The preschool program in South Africa does not include assistants, so one teacher was responsible for the entire class. The classroom was in no way adapted to the needs of six-year-olds. Indeed, none of the classrooms in the school could be considered adapted to the particular needs of young children.

The classroom had a bookshelf, which was practically empty, except for a few magazines. There was no carpeting for the children to sit on as they read. The drama corner was partitioned by two long benches that left an opening that served as an entrance. Next to the door was a bucket of water for children to wash their hands after painting activities. The walls had relevant educational pictures but none of children's work. A train indicated children's birthdays and a big picture showed the four seasons.

The tables and chairs in the room were small in size and appropriate for young children. They were arranged in groups of four to form squares. There was an open space between the tables and the chalkboard, and the teacher gathered children there when telling them Bible stories. The children brought their chairs with them to sit on. In addition to the equipment already listed, the classroom included materials for painting, working with dough/clay, colouring, cutting and pasting, doing puzzles and playing house.

How activities unfolded

The observation focused on indoor play activities, which was structured and monitored by the teacher throughout. These activities were simultaneous and took

advantage of virtually all of the resources the room had to offer. The teacher used the pupils as assistants in order to keep everything operational. For instance, while the teacher mixed paint, the children picked up and distributed the dough, crayons, magazines, and puzzles.

After the Bible story-telling period which opened the school day, the teacher instructed the children to take their seats. She asked one child from each group to collect the materials the group was to use. While they did this, she mixed paint and placed it on one of the tables. She then gave each child in the painting group a paintbrush, and then gave each child in the cut and paste group a pair of scissors. In this manner, the teacher organized and distributed materials that might spill or harm children and the children themselves handled everything else.

The number of children in groups varied according to the availability of materials. For example, children in the painting group were six in number because there were only six brushes. There were five in the cut and paste group because there were only five pairs of scissors.

During the activities the teacher rotated the groups, supervising the children and sometimes moving a child from one activity to another. For activities such as painting, and cut and paste, the teacher used one piece of paper per child. She identified each sheet by writing the child's name on it and adding the date. For colouring, the children all had colouring books and worked on the same page.

Activities

Painting

This activity was observed for about five minutes. Children were instructed to paint whatever they liked. It was not easy for the researcher to describe what the children drew, but each child was very clear on what she or he had drawn. The social interaction of the painting group was one directional: from the centre of the group where the paint was to the papers on which the children worked.

Since there were no easels, the children painted sitting at their desks. This limited social interaction since it was difficult for them to see and talk about what others were doing. Another limitation was the fact that the children only had one colour to paint with, blue.

When asked why the children were given a single colour of paint, the teacher explained that when given several colours the children tended to spoil their worksheets with paint drops of the wrong colour. She added that the availability of different colours also resulted in fighting amongst the children as they tried to get control of their favourite colours. She explained that she had tried giving each child a particular colour, but that this had also resulted in fighting.

Dough/clay

There were eight children in this group. The observation time was ten minutes. The dough was ready-made and was supplied by the government about two years ago, and the teacher had managed to preserve it in good condition. Some of the cutters had been provided by the government and some had been brought in by previous classes of children.

This activity seemed to stimulate the children a lot. They were clearly enjoying themselves as they worked. They were also able to see what other members were doing with their dough cutters. The cutters produced various kinds of animals with which children were familiar, and the children were keen to cut out every possible animal. Indeed, the children were so excited that they could hardly wait for someone to finish using a specific cutter. As soon as it was put down, another child would grab it and use it. Some children requested particular cutters from their classmates and were patient enough to wait for them. Others exchanged the cutters amongst themselves in pairs.

When the researcher asked the children what they were doing, she was told by some that they were baking cakes (probably because they were working with dough), while others said they were cutting out animals. During the activity one could hear " ke khatile tau"-L I (I've cut out a lion). and "nna ke pheha kgoho" -LI (I'm roasting a chicken), etc.

After cutting all of the dough, the children kneaded it again and started rerolling it out and cutting all over. One child got the idea of asking another to share half of her dough. In that way the pair could combine two colours, natural and red. The initiator laid one piece of dough on top of the other and started cutting. Other group members observed this and quickly took to doing the same thing. When the teacher wanted the children to change groups, those who had been cutting dough were so caught up in what they were doing that they refused. Eventually the teacher won out and they reluctantly changed groups.

Colouring (crayons)

In this activity, the children were eight per group in two groups. The duration of the observation was five minutes, and within that time two children from two different activity groups joined and two were shifted to other activities. First of all the teacher told the children which page and which drawing to colour. She then instructed them to use more than one colour. When asked about the reason for that instruction, she explained that she had taught children primary colours and she wanted to see how many they could remember.

Most of the children in this group carried out the teacher's instructions except for two or three who stuck to a single colour. The researcher asked one of these children why he was using only one colour. He explained that he liked the colour, red.

During the colouring activity, children interacted a good deal with each other, looking at how other children were colouring and chatting. Since crayons were available in good supply, the children did not have to negotiate the sharing of colours.

Cutting and pasting

This activity was also observed for 5 minutes. There were five children in a group. Each child had a magazine and a pair of scissors. The glue was in a big container with five pasting sticks. Firstly children thumbed through the magazines looking for pictures. They then cut out the pictures they liked and pasted them in on sheets provided by the teacher. The magazines had been brought in by teachers and children alike. The scissors being used were appropriate for young children and were meant to cut paper. The sheets on which the pictures are pasted are labeled with the child's name and are kept

safe at school. They are shown to parents during their meetings with teachers, and then given to parents at the end of each term to show their child's progress.

The children chatted with each other as they cut out pictures, and exchanged magazines . Most of the children in this group were able to hold magazines and do the cutting. When one child struggled, he was helped by the others. The children cut out anything they wished. Pictures of babies, types of food, people, animals and cars proved popular. Boys tended to cut soccer players, cars and cigarette ads, while girls cut out clothes, babies and food.

Puzzles

The puzzle group consisted of five children and the time allocated for observation was five minutes. The social interaction was a bit different from the rest of the groups. Three of the five children were sharing a puzzle which appeared to have at least 50 pieces. The other two children were playing separately with two small puzzles with about 35 pieces each. This set-up was dictated by the size and number of available puzzles. The three children working on the big puzzle shared pieces, talked and helped one another. They had no choice but to work together if they wanted to succeed. The two children working on the smaller puzzles also talked to each other but did not take their attention away from their puzzles to help each other. The puzzles were educational and seemed to stimulate the children.

Dramatic play.

Initially this activity was not allocated any group. As children came to tell the teacher they had done all the activities, the teacher would instruct them to go to the drama area. This occurred in the last five minutes before the bell rang for break. Only one group

managed to do this activity. They played house, making up a basic family. The children were able to pick clothes that they liked. Things such as buttons, zippers were intact for children's safety. The clothes were clean and stored in a steel trunk in the storeroom.

Language of interaction

In all of the activities the children communicated in their L1. The teacher approved of this saying that she felt preschool children should not be restricted in any way by language. The teacher was adamant that preschool children should feel free to play, be it indoors or outdoors. In her communication with the children, the teacher alternated between English and Sesotho. She said that her main aim was for the children to understand and follow basic commands in English.

A detailed discussion of what the questionnaire and school observations revealed is found in Chapter 5.

CHAPTER 5

DISCUSSION

Teachers

The questionnaire revealed that the participating teachers had substantial general teaching experience but considerably less experience at the preschool level. The reason for this discrepancy is very likely the late introduction of preschool programmes to Black schools. The participating teachers started their teaching careers with classes of older learners and then, took over teaching younger learners when preschools were introduced. This means that many of the teachers began to teach preschool children without any specific pre-service training in the field. They also had to learn to adjust to the needs and abilities of younger children, all while teaching.

The questionnaires revealed that over half of the teachers (54%) held specific pre-primary (PP) qualifications, often obtained after they had entered the work force. Those holding a Junior Primary Teacher's Diploma (JPTD) had likely covered some areas of pre-primary teaching in the course of their studies, since this programme included a pre-primary element prior to the creation of specific pre-primary training courses. This means that virtually all of the teachers have had some form of pre-primary training, even of it was not specifically labelled as such.

One striking feature of the teacher demographic is the absence of teachers in the 20 to 24-year-old age group and the low number of teachers under 30 years of age. This is a direct result of the saturation of the teaching market that began in 1998. The absence of very young teachers in the South African school system is probably taking a toll in several different ways. First of all, young teachers tend to be highly innovative and enthusiastic. Some of this enthusiasm is lost as teachers age, thus removing a certain

energy from the system. Secondly, the older a teacher, the more distant in time their initial training experience. Older teachers have likely had little recent exposure to new developments in the field of teaching and learning. While some teachers keep up by taking night courses or completing new degrees, many do not and become more and more out of touch with current educational thinking.

Children and Class Size

The size of classes is of important to this study. The smallest of the 24 classes surveyed had 22 children, while the largest had 48. Some of the classes were clearly too big for teachers to offer children much in the way of individual attention. The teachers also experienced management as well as discipline problems due to big class sizes. As the class observation reported in Chapter 4 shows, teachers were constantly trying to fit children to available materials, and a good deal of planning time was taken up trying to determine how everyone could be kept busy with the limited resources in the classrooms.

Another problem that confronted teachers with large classes was how to organize movement in the classroom without having the children trip over each other. Activities that required a lot of space for the children to move about in were simply impossible to do in most of the classrooms. It was also a struggle to find room for the limited resources that the teachers were able to gather together. Had some of the classes been fully equipped, there would have been little room left for the children!

Classroom Grouping and Grouping Criteria

A combination of class size and equipment availability determined the number of children in each group and the number of groups in the class. Having four children per group is an ideal classroom set up; some of the teachers surveyed were forced to form groups of up to nine or even occasionally ten children to reach a workable arrangement. Large groups bring with them all sort of disciplinary and management problems, especially when over 40 six-year-olds are involved.

When large groups are coupled with lack of resources, rotating children from one work group to another becomes nightmarish. For example, the teacher in charge of the class described in the narrative in Chapter 4 could not simply rotate her charges from one activity to another because the number of participants who could do each activity at once varied from one activity to another due to limited resources. The teacher found herself moving three children to one activity, two to another, four to a third, and so on.

Large class sizes also made it difficult for the teacher to keep track of the progress of individuals over the course of the year. Teachers with over 40 pupils in their care were hard-pressed to assess their learners' needs and provide any form of remediation or enrichment. It was very easy for children with mild learning problems to go undetected in many of the larger classes.

Resource Availability in the Classroom

All the classrooms represented in the study could be classified as under-resourced. The information summarized in Table 12 supports this assertion. Most classrooms (70.8%) had a paint corner and the possibility of children engaging in this activity was

high. While this is certainly a good thing – "experimenting with a paint can be a significant thing just as producing a finished picture" (De Witt, Rosouw, & Le Roux, 1994, p. 5) – the reality of paint corner as reflected by the observation reported in Chapter 4 is less than satisfactory. The children in this class were limited to a single colour of paint that was premixed by the teacher. In addition, they were working in a space that discouraged any sort of interaction between learners. Thus, even when resources are present in sufficient quantities for a small group to use them, other factors can mitigate to make their use less than optimal. As Burgess adds, "painting will not be an exciting activity for preschoolers if their only experience is using ready-mixed paints in non-spill containers that are applied with a brush to a white paper (DeWitt et al, 1994, p. 5).

Table 12 also reveals that interest corners (63%) were common in the 24 participating classes. These corners usually displayed materials related to the theme currently being investigated by the children. For example, if the children were talking about food, the interest corner might display a variety of different types of fruit and vegetables. The children working in the interest corner could feel and smell the fruit and vegetables, and might go on to learn the English words for them, draw them, paint them, or find pictures of them in magazines.

Teachers who indicated that they did not have an interest corner in their classrooms usually turned out to be those who had a high teacher-pupil ratio and lack of space. Some of the participating teachers had neither the space nor the furniture to display interest corner materials without depriving a child of his or her desk. These teachers often improvised by bringing pictures related to the theme to class and pasting them on the chalkboard.

Notable by their absence from classrooms were maths corners. Only 17% of reporting classrooms had a properly equipped mathematics area while 75% of classrooms had no maths corner at all. Given the importance of acquiring mathematical concepts starting from an early age and given the relative ease with which a maths corner can be set up (Maxim, 1991), the absence of mathematical resources is at once surprising and worrying.

Also noticeable by their absence are science corners. Less than one-quarter of the 24 classes in the study had properly equipped science facilities. As in the case of maths resources, this is surprising given that very simple and basic materials can be used to make a science corner.

Equally worrying is the absence of materials, such as blocks, that could be used to help children learn basic mathematical and scientific principles. A very small percentage of classrooms reported having blocks of any description in sufficient quantities. The shortage or absence of blocks in classrooms deprives children of other types of learning as well. Blocks provide endless chances for the development of perceptual-motor skills and also offer children endless possibilities for emotional satisfaction (Mayesky et al, 1990). Furthermore, block building promotes the development social relationships (National Department of Education, 1996).

Dramatic play such as dress-up and house play/keeping are also very social in nature. More importantly, they are activities that develop the use of language in children, something which must be done in both L1 and L2 in South Africa (Mayesky et al, 1990). Unfortunately, less than one-third of the classrooms surveyed provided children with fantasy or house play corners.

On a more positive note, 42% of classrooms had sand and water that children could play in. Sand, water and mud have a wonderful, messy, unstructured quality that makes them among the most popular creative play materials. They offer rich tactile sensory experiences and provide emotional relief as well. These materials also facilitate a lot of social interaction. Children love to play cooperatively with each other while digging tunnels, constructing roads, etc. They also offer children the chance to mix, stir, pour, measure, mould and are indispensable components of the pre-primary school. Since these experiences are often restricted at home, particularly in urban environments, it is important to offer them at pre-primary school (National Department of Education, 1996).

Overall, the reality of the playrooms surveyed is a sad one. Few materials are available in sufficient quantities for the learners and teachers to use them appropriately. More importantly, key items such as maths and science corners are completely missing from most of the preschool classes. When materials are present in sufficient quantities, large class sizes make them difficult to use in a meaningful way in teaching.

Ideal Preschool Classroom Conditions

The ideal classrooms of the participating teachers present a stark contrast to the reality described above. The teachers were keen to have virtually all of the teaching resources suggested by the researcher.

Although they wanted many things for their classes, the teachers remained practical and realistic in their ideals. For examples, cooking corners were less desired than maths and science corners because teachers felt that children were exposed to cooking at home. Rest corners were also less sought after because the teachers felt they

were not needed given that the children in their classes started at eight o'clock in the morning and ended at noon. It was felt that the children could rest afterwards, from 12:30 p.m. until 2:30 p.m., during which time the school provided baby-sitting services for them.

The most strongly desired resources were all important ones, with mathematics and reading leading the way. The preschool teachers clearly understood the importance of cultivating basic literacy and numeracy in their pupils. They understood the importance of children manipulating objects, counting and verbalizing their actions. They also understood the importance of putting children in contact with the written word in the form of posters, flashcards and books.

The teachers were also keen to have shop corners, cooking corners and water corners. In all of these places basic maths skills can be cultivated. Water in particular offers children a chance to improve problem-solving skills and to come to an understanding of such complex subjects as volume, buoyancy, and flow (Van der Stoep & Van der Merve, 1990).

In short, the teachers proved to be as reasonable and realistic in their view of the ideal classroom as they were in the face of materials shortages in their real life teaching experience. They gave primary importance to materials that would allow children to develop basic academic skills. Furthermore, they did not ask for equipment that would be impossible to use in their teaching contexts.

CHAPTER 6

CONCLUSION

What has been achieved?

All the stakeholders in South African education are very much concerned about the state of education in general and student results in particular, especially the matriculation rates in the country's secondary schools. To have excellent output, the input has to be laid from a solid foundation starting at the preschool level.

This study has looked at the current state of part of the foundation and has addressed the following questions: What is the state of materials and equipment where resources are very limited? What use do teachers make of available resources? What do teachers feel the ideal preschool playroom should look like in their schools? The best way of bringing this study to a close is now to answer each of the three questions in light of the data collected from the 24 preschool teachers who were observed and consulted.

In response to the first question concerning the availability of resources, the only conclusion to be drawn is that the schools are extremely poor. Even if it happened that they had materials, the chances were such that these materials were inadequate and insufficient. Furthermore, the scarcity of material had a negative impact on teaching and learning in the classrooms. The teachers struggled to form and reform groups so that the learners would have something to occupy them.

In response to the second question it could be said that the teachers made the best of a bad situation. They moved children from activity to activity with great skill. They also supplemented meager supplies by bringing things from home and having the children do the same. They also coped extremely well with large class sizes and language

difficulties. They cared profoundly about the children and this showed in the efforts they made to keep their classes operational.

When the teachers were asked about the ideal classroom, they showed moderation and good common sense. They gave high priority to basic materials that would promote the literacy and numeracy that the children in their classes needed.

One of the other achievements of this study is to provide an in-depth look at what was going on in 24 under-resourced classrooms with 100% Black learner and educator populations. Information about such schools is in short supply. Perhaps this study will serve to open new doors to researchers interested in what is going on in the many poor schools of South Africa.

Limitations of the Study

One of the main limitations of this study was the small number of schools that participated. In the end, the results represented what happened in 24 classrooms in ten schools. This means that the findings cannot be easily generalized to the broader South African context.

Another limitation comes from the fact that the researcher observed 24 teachers but could not manage to make recordings for all of the classes. The result was a detailed observation narration of a single classroom. While this narration is useful in helping the reader understand how the teachers coped with the lack of resources in their classes, it does not provide a broad, inclusive portrait of the classes observed.

The researcher also discovered that some items in the questionnaires were not answered by many teachers. This was probably attributable to the difficulties some

teachers had in understanding what was being asked of them. Language may have played a role here. The questionnaire was in English only, the second (or third or fourth) language of the teachers who responded. There was also a time factor. The questionnaire was quite long and included a number of write in items. Some teachers may have opted to skip items in order to complete the task more quickly. Some items were left blank by so many respondents that they were finally excluded from analysis.

Recommendations for Future Studies

The present government is seen to be committed to providing quality education for all from the preschool level right up to Grade 12. The conditions that were discovered in this study show that there is still a good deal of work to be done to provide all children with the same quality of materials and resources. There is therefore a need to carry out similar classroom survey studies over the coming years to determine if conditions are improving or not.

There is also a need to look more carefully at the role of preschool education in preparing children of poor backgrounds for further education. Some work has been done in the United States and the United Kingdom, but the problems particular to South Africa have been largely unexplored.

Language was clearly a problem in the participating classrooms. The teachers did their absolute best to strike a balance between using English to prepare the children for later grades and using Sesotho so their pupils could follow what was going on and feel comfortable in the classroom. Research into both the importance of mother tongue

maintenance and basic literacy is urgently called for in South African preschools and primary schools.

Research is also required in the field of in-service teacher training. Many of the participating teachers could probably have benefited from further support in using and creating materials in a preschool environment. In-service support might also provide a moral boost for beleaguered teachers trying to cope in very poor teaching conditions.

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APPENDIX A

FREE STATE PROVINCIAL GOVERNMENT

Education

Private Bag X20565 - Bloemfontein - 9300 - South Africa
55 Elizabeth Street - CR Swart Building - Bloemfontein
Tel.:- +27 (0) 51 - 4074911 - Fax : +27 (0) 51 - 4074036

Enquiries : Mr W.B. van Rooyen/LB
Reference no. 0-1/11/3/3

Tel. : 051-405 5504
Fax : 051-403 3421

02 August 1999

Mr T. I. Makume
Director (South Africa): Uniqiwa / Concordia Project
University of the North
Qwa Qwa Campus
Private Bag X 13
PHUTHADITJHABA
9866

Dear Mr Makume

REQUEST TO CONDUCT RESEARCH IN THE FREE STATE DEPARTMENT OF EDUCATION

1. Your request dated 9 June 1999 and the detailed research requests for eleven students received on 1 July 1999 refer.
2. Research titles applied for:

Name:	Titles:
Me Makgoarai Mofutsanyana:	The effect of intervention strategies used by teachers on the academic performance of learners with behaviour and/or emotional disorders in the Eastern Free State.
Mr Letekatoa Taoana:	Conceptual difficulties experienced by grade 12 pupils in basic concepts of chemistry, specifically the Mole.
Mr Molefi Tbobileng:	A survey of what facilitates or hinders ESL learning in QwaQwa high schools.
Ms Maria Nkosi:	How effectively do pre-primary school playroom(s) assist children to develop holistically (i.e., Intellectually, Emotionally (affective), Socially and Physically (fine and gross motor) through various learning centers (areas)
Mr Molefi Mofokeng:	Rethinking the sources of disaffection among secondary school students.

Mr Tatolo Edgar Molebatsi:	An investigation into the high failure rate of ESL grade 12 Exams.
Mr Thabo Letho:	An effective student - Teaching practice programme.
Mr Mohapi Mohaladi:	The relationship between matric pass rate and the extent of Total Quality Management (TQM) principles implemented in Harrismith District Schools.
Mr Paseka Maboya:	A study of parental / guardian involvement in decision making structures and processes at tertiary-level institutions in South Africa with special reference to tertiary educational institutions in the Free State Province.
Ms Varaluxmi Chettv	The role of organisation and management towards increasing pupil achievement in rural schools.
Me Mamokhele Julia Mami Maduna	Supporting curriculum change in the classroom: An analysis of the impact of the use of teaching aids in mathematics teaching and learning in QwaQwa primary schools.

3. Permission is granted for the above students to conduct research in the Free State Department of Education under the following conditions:
   - 3.1 The names of teachers/learners (where applicable) must be provided by the principals.
   - 3.2 Officials / Principals / HOD's / Teachers / Learners (where applicable) participate voluntarily in the projects.
   - 3.3 Where applicable, the names of schools and respondents involved remain confidential in all respects.
   - 3.4 Completion of questionnaires by teaching staff and learners must take place outside normal tuition time of the school.
   - 3.5 This letter must be shown to all participating persons.
   - 3.6 Individual reports on the 11 projects must be donated to the Free State Department of Education after completion of the projects where it will be accessed in the Education Library, Bloemfontein.
   - 3.7 You must address a letter to the Head: Education, for attention
     W.B. van Rooyen
     Room 1211
     C.R. Swart Building
     Private Bag X20565
     BLOEMFONTEIN
     9301
     accepting the conditions as laid down.

4. We wish the students every success with their research.

Yours sincerely

HEAD: EDUCATION

APPENDIX B

Concordia-Uniqwa Masters Research Project

QUESTIONNAIRE FOR TEACHERS

Kindly complete the following questionnaire. It has three sections I, II, III.

I. PERSONAL INFORMATION

1. How long have you been in the teaching profession? .....
2. How long have you been teaching preschool children? .....
3. Did you train for the pre-primary phase? ( ) Y ( ) N, Please describe the training you have had. .....
   .....
   .....

4. Is your teaching post ( ) permanent or ( ) temporary?

5. In which age group do you belong?

20-24yrs 25-29yrs 30-34yrs 35-39yrs 40-44yrs 45 -above

II. CLASSROOM ORGANISATION

6. What is the age range of the children in your classroom? .....

7. How many children are there in your classroom? Boys ( ) Girls ( )

Please tick (√) the appropriate box.

8. Are children grouped according to the following criteria?

   ( ) By Ability

   ( ) By Friendship.

   ( ) Assigned to heterogeneous groups by the teacher.

   ( ) Randomly assigned by the teacher.

9. How many groups are there in your classroom?.....

10.How many children per group?.....

11.Are the groups permanent? ( )Y ( ) N

Why? .....

.....

.....

III. CLASSROOM MANAGEMENT

12. How do you keep track which group did which activities daily?

.....

.....

.....

13. How and where do you store children's work in progress?

.....

.....

.....

14. Are children allocated individual identification symbols? ( ) Y ( ) N

Why? .....

.....

.....

15. Do they (children) use these symbols? ( )Y ( ) N

If yes, explain how and where do they use these symbols?

.....

.....

.....

16. What are the main activities that you do with children? (about 5/6)

.....

.....

.....

17. What additional activities do you do with children? (about 5/6)

.....

.....

.....

18. Is it compulsory that all the children participate in the main activities?

( )Y ( ) N

19. Why? .....
.....

20. Which themes do you treat with your class? (mention a few)
.....
.....
.....

21. How do you link the themes to the main and side activities?
.....
....
.....

I like to thank you for your effort and time in completing this questionnaire.

FUNDAMENTAL LEARNING EXPERIENCES PROVDED IN THE PRE-SCHOOL CLASSROOM

N.B. Indicate your answer with an "**X**" for each of the learning areas/centres displayed or arranged in the playroom.

IV. ACTUAL CLASSROOM CONDITIONS

Learning areas/centres (indoors)	**Available and sufficient**	**Available but insufficient**	**Not available**
Doll corner/house play			
Baking/cooking			
Dressing/fantasy			
Dough/ Clay			
Painting			
Collage			
Junk & woodwork			
Construction			
Rest area			

Learning areas/centres (indoors)	**Available and sufficient**	**Available but insufficient**	**Not available**
Shopping corner			
Puppet area			
Maths centre			
Sewing & knitting area			
Learner's own cubicles & symbols			
(outdoors)			
Sand			
Water			
Rest area			

Discovery areas and related materials	**Available and sufficient**	**Available but insufficient**	**Not Available**
Music/sound			
Science bench			
Plants & animals			
Large blocks			
Multishape blocks			
Table blocks			
Balancing blocks			
Moveable block bin			
Block wagon			
Fitting tongue & grooved blocks			
Book/reading corner			
Educational toys, games & puzzles			

V. IDEAL CLASSROOM CONDITIONS

Please select the learning area/corner you like to have in your classroom. Indicate your preference as follows:
0 = Undesired, 1 = Slightly desired, 2 = Moderately desired, 3 = Strongly desired, 4 = Very strongly desired, 5 = Essential

EXAMPLE: Fantasy area [5]

Learning areas/centers in a playroom	**Desirability 1 to 5**
Doll's corner/ House play	
Dressing up/ Fantasy area	
Baking/cooking	
Dough/ Clay	
Painting	
Collage	
Junk & Woodwork	
Construction	
Rest area	
Math centre	
Puppet centre	
Sewing and knitting area	
Learner's own cubicles & symbols	
Toilet facilities: learner's own face cloths with symbol identification	
Music, sound	
Science bench	
Interest corner (variety topics)	
Plant & animal (toys)	
Large blocks	
Multishape blocks	
Table blocks	
Balancing blocks	
Moveable block bin	
Block wagon	
Fitting tongue & grooved blocks	
Educational toys & games, puzzles	
Book/reading corner	
Outdoor play area:	
Sand	
Water	

What other learning activities do you think the school would benefit from, and which of these would you like to have in your playroom?
0 = Undesired, 1 = Slightly desired, 2 = Moderately desired, 3 = Strongly desired, 4 = Very strongly desired, 5 = Essential

Learning activities	**Desirability**